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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/632,154	08/03/2000	Dave Leahy	17376-5-1US	1133

7590 06/02/2005

GENERAL PATENT CORPORATION INTERNATIONAL
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SUFFERN, NY 10901

EXAMINER

NGUYEN, CAO H

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/632,154

Applicant(s)

LEAHY ET AL.

Examiner

Cao (Kevin) Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8, 15-20 and 22-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-8, 15-20 and 22-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/02/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 5-8 and 15-20, and 22-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. (US Patent No. 5,736,982).

Regarding claim 4, Suzuki discloses a method for enabling a first user to interact with other users in a virtual space, wherein the first user and the other users each have an avatar and a client process associated therewith, and wherein each client process is in communication with a server process [..a plurality of terminals are connected to a server via a communication network and shared a predetermined common virtual space; see abstract], comprising: (a) receiving a position of at least some of the other users' avatars from the server process [..a plurality of terminals connected via a communication network share a virtual space and are allowed to freely move avatars of terminal users in the virtual space and display on their terminal displays the scenes that the avatars are observing in the virtual space. Images representing the avatars of the users are formed at the positions of the avatars in the virtual space. The scene in the virtual space that is displayed on a display unit of each user terminal contains avatar images of other users in the field of vision of the avatar of each user in the virtual space; see col. 4, lines 18-20.]

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(b) determining from the received positions a set of the other users' avatars that are to be displayed to the first user [..the architecture of a virtual space VS provided beforehand for the terminal control device 12 of the terminal unit 10.sub.1 of a user U1, positions P1 and P2 of avatars A1 and A2 of users in the virtual space VS and the directions of eyes of the avatars A1 and A2. Moreover, position P1' indicates the position of the avatar A1 having moved thereto and the direction of eye at the position P1' is indicated by the arrow ED1'. On the other hand, FIG. 4B shows a visual field image that the avatar A1 observes in the direction ED1 from the position P1; this visual field image is displayed on the display 13 of the terminal unit 10.sub.1 of the user U1; see col. 5, lines 18-67]; wherein steps (a) and (b) are formed by the client process associated with the first user (see col. 8, lines 16-65).

Regarding claim 6, Suzuki discloses a method for further comprising the steps of monitoring an orientation of the first user's avatar; and (d) displaying the set of the other users' avatars from based on the orientation of the first user's avatar as monitored is step (c), wherein steps and (d) are performed by the client process associated with the first user (see col. 14, lines 7-47).

Regarding claim 7, Suzuki discloses wherein step (a) further comprises (a)(1) receiving an orientation of at least some of the other users' avatars from the server process (see figures 9A-9F).

Regarding claim 8, Suzuki discloses wherein step (b) comprises (b)(1) determining from the received positions an actual number of the other users' avatars; (b)(2) determining a maximum number of the other users' avatars that can be displayed; and (b)(3) comparing the

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actual number to the maximum number to determine which of the other users' avatars are to be displayed, wherein steps (b)(1)-(b)(3) are performed by the client process associated with the first user (see col. 20, lines 17-67).

Regarding claim 15, Suzuki discloses transmitting the positions of the first and second avatars by the first and second client processes, respectively, to the server process; (c)transmitting the positions of the first and second avatars, by the server process, to the second and first client processes, respectively; and (d) determining, by the second and first client processes, from the positions of the first and second avatars, respectively, whether to display the first and second avatars; see col. 24, lines 1-67).

Regarding claims 16 and 17, Suzuki discloses (e) displaying the first and second avatars when it is determined in step (d) that the first and second avatars are to be displayed; and wherein step © comprises automatically sending the data indicating a position of the first and second avatars, by the server process, to the second and first client processes, respectively (see col. 27, lines 18-56).

Regarding claim 19-20, Suzuki discloses wherein the step © comprises the step of automatically transmitting, by the server process to each client process, the positions of at least some of the avatars that are not associated with the client process (see col. 12, lines 1-67.)

Claims 22, 30, 32 and 35, differ from claim 5 in that “synchronously disseminating the positions of the avatars not associated with a particular client process to each of the client processes a packet of information updating a list of avatars displayed to the client process so that the client process can determine from the packet a set of avatars that are to be displayed” which read on Suzuki (see col. 31, lines 24-67).

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Regarding claim 23, Suzuki discloses the first client process is operable to the positions of the avatars associated with at least some of the other users; and determine from the received positions a set of the other users' avatars that are to be displayed (see figures 17-20).

As claims 24 and 25-29 and 36-39 are analyzed as previously discussed with respect to claims 5 and 8 above.

Response to Arguments

1. Applicant's arguments filed on 12/02/04 have been fully considered but they are not persuasive.

On page 14, first paragraph of the Remark; Applicant argue that Suzuki does not teach or suggest "determining from the received positions a set of the other users' avatars that are to be displayed to the first user; and are performed by the client process associated with the first user". However, the limitations as claimed set forth to rely on Suzuki "the architecture of a virtual space VS provided beforehand for the terminal control device 12 of the terminal unit 10.sub.1 of a user U1, positions P1 and P2 (given as coordinate values) of avatars A1 and A2 of users in the virtual space VS and the directions of eyes (indicated by the arrows ED1 and ED2) of the avatars A1 and A2. Moreover, position P1' indicates the position of the avatar A1 having moved thereto and the direction of eye at the position P1' is indicated by the arrow ED1'. On the other hand, FIG. 4B shows a visual field image that the avatar A1 observes in the direction ED1 from the position P1; this visual field image is displayed on the display 13 of the terminal unit 10.sub.1 of the user U1. FIG. 4C shows a visual field image that the avatar A1 in FIG. 4A

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observes at the position P1' after having moved thereto, the direction of its eyes being indicated by the arrow ED1'. When the user U1 instructs, by a joystick or similar control device 14 of his terminal 10.sub.1, his avatar in the virtual space VS to move rightward from the position P1 to the position P1' as shown in FIG. 4A, the terminal control device 12 responds to the "move" instruction to display on the display 13 the visual field image in the virtual space VS viewed from the new position P1' (FIG. 4C) in place of the visual field image from the position P1 displayed until then (FIG. 4B), and the control device 12 sends the new position P1' from the interface 11 to the server 50 via the communication network NW. The avatar image A1 representing the user U1 in the virtual space VS is not displayed on the display 13 of the terminal 10.sub.1 of his own. In this embodiment, the avatar image A2 of the other user U2 is displayed in the visual field image viewed from the viewing point P1'; see col. 5, lines 18-50 and col. 8, lines 16-65.

On page 14, last paragraph of the Remark; Applicant argue that Suzuki does not teach or suggest "determining by the second and first client processes, from the positions of the first and second avatars, respectively, whether to display the first and second avatars. However, the limitations as claimed set forth to rely on Suzuki "since in the centralized connection type systems of FIGS. 27 and 28 the latest position information of avatars of all terminals is stored in the position information distributing part 52A of the server 50 in FIG. 27, the distances between the avatar of each terminal and the avatars of the other terminals are calculated through the use of the stored position information, then the levels of resolution and/or the numbers of frames per second of the video images to be sent to each terminal from the others are determined according to the distances between them, and the video images are processed in the video

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processing part 52K accordingly. In this instance, the distance/eye contact decision part 12N need not be provided in the terminal of FIG. 28. In the case of the distributed connection type system, the levels of image quality of the avatar of each terminal user relative to the avatars of the other users are determined in the distance/eye contact deciding part 12N on the basis of the relationship between the position information of the avatars of the other users received in the terminal of FIG. 29 from the other terminals and the position information of the avatar of the user of this terminal, and the video image of the terminal user is sent at the determined levels of quality from the video storage and processing part 12Q to the other terminals; see col. 23, lines 27-56).

On pages 15-17 of the Remark; Applicant argue that Suzuki does not teach or suggest “synchronously disseminating the positions of the avatars not associated with a particular client process to each of the client processes a packet of information updating a list of avatars display army the client process so that the client process can determine from the packet a set of avatars that are to be displayed. However, the limitations set forth to reply on Suzuki “A virtual space sharing apparatus which has a plurality of terminals connected to a communication network and sharing a predetermined common virtual space and generates and displays a visual field image which changes as an avatar representing a user of each terminal moves in said virtual space at said each terminal, said each terminal comprising control means which generates signals for selectively specifying its position and direction in eyes in said virtual space; visual field image generating means which generates a visual field image in said direction of eyes in said virtual space from said position as a viewing point; position information sending and receiving means which sends said position and said direction of eyes as position information to said

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communication network and receives therefrom position information sent from other terminals; avatar image forming means which forms avatar images representative of users of said other terminals in said visual field at positions corresponding to said received position information; and display means which displays a combined image containing said visual field image and said avatar images; said terminals being interconnected via said communication network, and each of said terminals comprising speech sending and receiving means which sends speech data of its user to all the other terminals via said communication network and receives there through speech data of users of said other terminals; select means which calculates, from position information received from said other terminals, the distances between the avatar of the user of said each terminal and said other avatars and selects those of said other avatars which have said distance within a predetermined threshold value; (see col. 24, lines 42-67).

Accordingly, the claimed invention as represented in the claims does not represent a patentable distinction over the art of record.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (see PTO-892).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

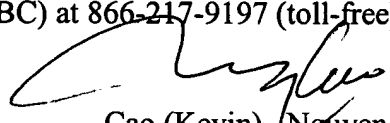
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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cao (Kevin) Nguyen whose telephone number is (571)272-4053. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571)272-4048. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cao (Kevin) Nguyen
Primary Examiner
Art Unit 2173

05/12/05